

CLAIMS

1. A functional ceiling system (1) comprising primary channels (10), secondary channels (20), generally perpendicular thereto, and hanger brackets (40) for
5 connecting the primary (10) and secondary channels (20) and including hanging means (41, 61) for hanging said ceiling system (1) from an original ceiling, **characterized** in that wings (21) are provided at the ends of the secondary channels (20) for insertion in overlapping slots (11, 42)
10 in the primary channels (10) and in the hanger bracket (40), locking the primary channels (10) and the secondary channels (20) to the hanger bracket (40).

2. The functional ceiling system (1) according to claim 1, wherein the wings (21) provide a locking action of
15 the secondary channels (20) by being bent.

3. The functional ceiling system (1) according to any of the preceding claims, wherein a connector (50) locks the wings (21) in a bent position by providing a support wall (50 b) that engages the bent wings.

20 4. The functional ceiling system (1) according to claim 3, wherein the connector (50) is inserted in overlapping slots (12, 43) in the primary channels (10) and the hanger bracket (40), respectively.

5. The functional ceiling system (1) according to
25 claims 3 and 4, wherein the connector (50) comprises fins (51) with a broader top portion (52) compared to a base (53).

6. The functional ceiling system (1) according to claims 3-5, wherein the connector (50) comprises a hooking
30 means (54), that "pops" over the bent wings 21.

7. The functional ceiling system (1) according to claims 3-6, wherein the connector (50) is manufactured from plastic, e.g. a thermoplastic.

8. The functional ceiling system (1) according to any
35 of the preceding claims, wherein the wings (21) comprise

locking means (45') that engage locking means (45) on the hanger bracket (40), to prevent the secondary channels (20) to "pop" upwards.

5 9. The functional ceiling system (1) according to any of the preceding claims, wherein hooking means (46, 46') on the hanger bracket (40) and on the secondary channels (20), respectively, stabilises the secondary channels (20).

10 10. The functional ceiling system (1) according to any of the preceding claims, wherein side portions (40 b, 40 c) of the hanger bracket (40) fits in a space provided between stabilising portions (10 b) and a bottom portion (10 a) of the primary channel (10), the relative position of the hanger bracket (40) and the primary channel (10) being governed by engagement of projections (44) on the
15 hanger bracket (40) and indentations (13) on the primary channel.

11. The functional ceiling system (1) according to any of the preceding claims, wherein the wings (21) are provided with bend facilitating means (22).

20 12. The functional ceiling system (1) according to any of the preceding claims, wherein the primary (10) and secondary (20) channels comprise stabilising portions (10c, 20c)

25 13. The functional ceiling system (1) according to any of the preceding claims, wherein the hanger bracket (40) is provided with hanging means (41).